

# OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

*Edited by*

**FRANCIS HEMMING, C.M.G., C.B.E.**  
Secretary to the Commission

VOLUME 8. Part 3. Pp. 29—48

## OPINION 286

Suppression, under the Plenary Powers, of the specific name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax* (Class Insecta, Order Lepidoptera)



**LONDON :**

Printed by Order of the International Trust for  
Zoological Nomenclature  
and

Sold on behalf of the International Commission on Zoological  
Nomenclature by the International Trust at its Publications Office  
41, Queen's Gate, London, S.W.7  
1954

**Price Ten Shillings**

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# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

## COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 286

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*Secretary* : Mr. Francis Hemming (*London, England*).

### B. The Members of the Commission

(arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology).

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Professor Teiso ESAKI (*Kyushu University, Fukuoka, Japan*) (17th April 1950).

Professor Pierre BONNET (*Université de Toulouse, France*) (9th June 1950).

Mr. Norman Denbigh RILEY (*British Museum (Natural History), London*) (9th June 1950).

Professor Tadeusz JACZEWSKI (*Department of Systematic Zoology, Warsaw University, Warsaw, Poland*) (15th June 1950)

Professor Robert MERTENS (*Natur-Museum u. Forschungs-Institut Senckenberg Frankfurt a. M., Germany*) (5th July 1950).

Professor Erich Martin HERING (*Zoologisches Museum der Humboldt-Universität zu Berlin, Germany*) (5th July 1950).

## OPINION 286

### SUPPRESSION, UNDER THE PLENARY POWERS, OF THE SPECIFIC NAME "AJAX" LINNAEUS, 1758, AS PUBLISHED IN THE COMBINATION "PAPILIO AJAX" (CLASS INSECTA, ORDER LEPIDOPTERA)

**RULING :** (1) Under the Plenary Powers, the specific name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* as Name No. 117 :—*xuthus* (emend. of *xanthus*) Linnaeus, 1767, as published in the combination *Papilio xanthus* (emended in the same work to *xuthus*).

(3) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* as Names Nos. 68 and 69 respectively :—(a) *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax*, as suppressed, under the Plenary Powers, under (1) above ; (b) *xanthus* Linnaeus, 1767, as published in the combination *Papilio xanthus* (an Invalid Original Spelling for *xuthus*).

#### I.—THE STATEMENT OF THE CASE

On 10th July 1945 Dr. A. Steven Corbet (*British Museum (Natural History)*, London) submitted the following application,

asking for the suppression, under the Plenary Powers, of the specific name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax* (Class Insecta, Order Lepidoptera) :—

**Proposed use of the Plenary Powers to suppress the trivial name “ Ajax ”  
Linnaeus, 1758, as published in the combination “ Papilio Ajax ”  
commonly but incorrectly applied to the species named  
“ Papilio marcellus ” by Cramer in 1777 (Class Insecta,  
Order Lepidoptera)**

By A. STEVEN CORBET

(British Museum (Natural History), London)

In Linnaeus' original diagnosis of *Papilio ajax* in 1758, *Systema Naturae* (ed. 10) 1 : 462, the very brief description (“ P/apilio/ E/ques/ alis obtuse caudatis concoloribus fuscis : fasciis falvescentibus, angulo ani fulvo ”) is followed by two citations and an indication of the habitat as follows :—

*Raj. ins.* 111. n. 2

*Edw. av.* 34

“ Habitat in America boreali.”

There is no mention of *P. xuthus* in the 10th edition and the description of *P. ajax* is followed by that of *P. machaon*.

There is no mention of *P. ajax* in 1764, *Mus. Lud. Ulr.* but in 1767, in the 12th edition (*Syst. Nat.* (ed. 12) 1 (2) : 750) the description of *P. ajax* is repeated precisely as in the 10th edition. On the following page in the 12th edition, appears the first description of *P. xanthus* (corrected to *xuthus* in the index), with “ Habitat in India orientali ” and “ Simillimus P. Ajaci ”. The diagnosis of *P. xuthus* is more detailed than that of *P. ajax* and there are no references to works of other authors.

While there has been no doubt regarding the identity of *P. xuthus*, much confusion has been associated with the determination of *P. ajax* ; in fact, so involved had the position become that Rothschild and Jordan abandoned the name in their “ Revision of the American Papilios ” in 1906 (*Novit. zool.* 13 : 413—414). This confusion would not have arisen, had the Linnean collection been adequately studied, for therein is an undoubted Linnean specimen, low-set on a long, black, headless pin of the type which I called a “ Cantonese pin ” in an earlier paper (Corbet, 1942, *Proc. R. ent. Soc. Lond.* (B) 11 : 91), and labelled “ ajax ” in Linnaeus' writing and “ xuthus 751 ” by Smith. The specimen in question is *P. xuthus* and the pin may be

taken as evidence of its Cantonese origin ; almost certainly, it is one of the butterflies obtained by Peter Osbeck when he visited Canton in 1751.

In Linnaeus' own copy of the 10th edition of the *Syst. Nat.*, there is the following manuscript note added to the description of *P. ajax*.

“ Simillimus Machaon, sed magis flavis. Valde affinis Ajax, Machaon, Podalirius, Antilochus, Protesilaus ”.

*P. ajax* is among the species marked by Linnaeus as being in his collection in his own copy of the 12th edition, while *xuthus* is not so marked.

There is nothing in the description of *P. ajax* in either the 10th or 12th editions, which conflicts with what must clearly be regarded as the type specimen. It appears that Linnaeus described this same species again under the name *xanthus* (recte *xuthus*) from the same or another specimen, but this is not a unique occurrence for both *P. aonias* and *P. lemonias* were described in the 10th edition from specimens of the dry-season form of the same species of *Precis* and, in the same volume, Linnaeus published names for three nominal “species”, based upon specimens of two species only (*Papilio perius* and *P. hylas*). Unfortunately, however, the Linnean collection was not available to the early authors and, even if it had been, no convincing conclusion could have been drawn without research into the manner of setting, pinning and labelling, in order to judge the authenticity of any supposed Linnean specimens. The early entomologists were obliged to identify *P. ajax* on the basis of the meagre description and the conflicting citations and in consequence mistakes were inevitable.

The Linnean description of *P. ajax* applies equally well to several species of *Papilio* (*sensu stricto*) of similar facies and the references to Edwards and Ray do nothing to clarify the position. The reference to Edwards, 1743, *Natural History of Uncommon Birds* 1 : 34, t. 34 given in the 1758 description of *P. ajax* was cited under *P. protesilaus* by Linnaeus in 1764, *Mus. Lud. Ulr.*, and yet again referred to *P. ajax* in 1767 in the 12th edition of the *Syst. Nat.* According to Rothschild and Jordan (1906, *Novit. zool.*, 13 : 413), Edwards' figure cannot be reconciled with the Linnean description of *P. ajax* and, in fact, represents the American species well known as *Papilio marcellus* Cramer [1777]. The reference to Ray, 1710, *Historia Insectorum* : 111 (no. 2), depends on a reference by the latter author to a rather fantastic figure in Mouffet, 1634, *Insectorum sive Minimorum Animalium Theatrum* : 98 which Rothschild and Jordan identified as the American species *P. glaucus* Linnaeus, 1758. The coloured figure labelled “ajax 26” in Clerck, 1764, *Icones Insectorum rariorum* 2 : t. 33. fig. 3 (a figure which was certainly seen by Linnaeus before

publication) represents yet another American species, *P. polyxenes* Fabricius, 1775.

In view of this confusion of figures by Linnaeus, Rothschild and Jordan considered the wisest course was to discard the name *ajax* altogether; on the other hand, Holland (1931, *The Butterfly Book*, Revised Edition : 321) continued to employ the name for the species *P. marcellus* Cramer, to which the name *ajax* had been applied since Linnaeus' day. In the interests of stability of zoological nomenclature, it is clearly undesirable to leave the matter as it stands. Either the name *ajax* should be employed for the species which would be so designated under the usual procedure based on the *Règles Internationales* or application should be made to the International Commission on Zoological Nomenclature for a suspension of the Rules in order to invalidate the name *ajax* on the grounds that a strict enforcement of the law of priority would result in greater confusion than uniformity.

In my opinion, there is no doubt that the name *Papilio ajax* Linnaeus, 1758, should be applied to the oriental species universally known as *Papilio xuthus* Linnaeus, 1767. In previous papers I have attempted the identification of the Linnean names of oriental Rhopalocera by taking as the type specimen of the respective nominal species :

(a) the specimen(s) in the Museum of Queen Ludovica Ulrica in the case of species where Linnaeus added the letters "M.L.U.", to his original description. (With a few species marked "M.L.U." in the descriptions, the specimens were missing from the Queen's collection but I found them in the Linnean collection.)

(b) the specimen(s) in the Linnean collection when these were identifiable as Linnean with reasonable certainty and where the original description contained no reference to "M.L.U."

(c) a figure cited by Linnaeus when the species was not in the Queen's or the Linnean collection. It appears that in only two instances among the oriental butterflies (*P. helena* and *P. eryx*) did Linnaeus rely entirely on figures.

It has been found that, if the above principles are followed, there is little or no trouble regarding the Linnean names of oriental Rhopalocera as these would continue to be employed in the sense used by the older authors. On the other hand, if preference were given to figures cited by Linnaeus over specimens in the Queen's museum and the Linnean collection, ambiguity and uncertainty must follow.

It has been pointed out in a previous paper (Corbet, 1942, *loc. cit.* : 91) that, although Sir James Edward Smith added to the Linnean collection after he purchased it, there is no evidence of label-changing

and in very few instances is there more than a single pin-hole in the original label. Everything points to the specimen of *P. xuthus* referred to above as having been labelled "ajax" by Linnaeus, and it has every claim to be regarded as the type specimen of *P. ajax* and as such I consider it.

Thus, if the International Rules are followed, the species long-known as *P. xuthus* will in future have to be known as *P. ajax* Linnaeus and the former name will sink as a synonym. This would be deplorable, not so much because a well-known name would disappear, but because of the uncertainty which has surrounded the name *P. ajax* in the past.

The name *P. ajax* Linnaeus has been applied almost consistently although, incorrectly, to *P. marcellus* Cramer and a voluminous literature has grown up around this name, and I think it will be conceded that its suppression is in the best interests of entomology. It is accordingly hoped that the International Commission on Zoological Nomenclature will exercise the Plenary Power conferred upon them by the International Congress of Zoology, and promulgate an *Opinion* to the following effect :—

The name *Papilio ajax* Linnaeus, 1758, is not to be employed for the species generally known as *Papilio xuthus* Linnaeus, 1767, although it has priority over this latter name, nor is it to be used for any other species.

## II.—THE SUBSEQUENT HISTORY OF THE CASE

2. *Registration of the present application* : On receipt, Dr. Corbet's application was given the Registered Number Z.N.(S.) 192.

3. *Issue of Public Notices in 1947* : On 14th November 1947 Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given to the serial publications prescribed by the Ninth International Congress of Zoology, Monaco, 1913. The publication of these Notices elicited no objection to the action proposed.

4. *Postponement of the present application at Paris in 1948* : By the time that the International Commission on Zoological Nomenclature assembled in Paris in 1948 for the Session of Meetings arranged to be held during the Thirteenth International Congress of Zoology, the present application had reached a stage at which it would have been possible for the Commission to reach a decision upon it. In view, however, of the limited time then available, it was found impossible during the Paris Session to deal with all the cases then awaiting attention, and the present was one of those which was inevitably postponed for this reason. In the period immediately following the Paris Session, it was necessary to devote the entire resources of the International Commission to the preparation and publication of the Official Records of that Session. It was not until the autumn of 1950 that it was possible to resume preparations for the publication in the *Bulletin of Zoological Nomenclature* of applications relating to individual nomenclatorial cases submitted to the International Commission for decision. The present case was included in the first instalment of applications sent to the printers in September 1950 for immediate publication in the *Bulletin of Zoological Nomenclature*.

5. *Supplementary Note by Mr. Francis Hemming* : At the same time that Dr. Corbet's application was sent to the printer, Mr. Francis Hemming, as Secretary to the Commission, prepared the following note on the procedural problems involved in that application :—

**On the proposal that the trivial name " Ajax " Linnaeus, 1758, as published in the binominal combination " Papilio ajax " should be suppressed by the International Commission on Zoological Nomenclature under its Plenary Powers**

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The late Dr. A. Steven Corbet, who at the time of his death was undoubtedly the foremost authority on the Linnean butterflies, has shown that the type specimen of the nominal species *Papilio ajax* Linnaeus, 1758, is still preserved in the Linnean collection in London and that, contrary to the universal belief of all previous workers (none of whom had studied the Linnean collection), the name *Papilio ajax*



was not bestowed by Linnaeus upon a Nearctic species but upon the well-known Palaearctic and Oriental species to which Linnaeus himself in 1767 gave the name *Papilio xuthus*, by which it has ever since been known.

2. On making the foregoing disconcerting discovery, Dr. Corbet realised at once the appalling nature of the confusion which would ensue if, after having been applied for nearly two hundred years to Nearctic species, the trivial name *ajax* Linnaeus, 1758, as published in the binominal combination *Papilio ajax*, were now to be applied to a very well-known species belonging to an entirely different zoo-geographical region, a species, moreover, which had been known by the trivial name (*xuthus* Linnaeus, 1767) currently applied to it ever since that name had been published nearly two hundred years ago. It was for this reason that in 1946 Dr. Corbet submitted to the International Commission on Zoological Nomenclature a request that it should use its Plenary Powers to prevent the confusion which would be quite inevitable if the *Règles* were to be strictly applied in the present case.

3. The question which has now to be considered is therefore how best the International Commission could use its Plenary Powers to secure the desired end. There are two possible courses of action, each of which possesses certain advantages :

- (1) to suppress the trivial name *ajax* Linnaeus, 1758, altogether ;
- (2) to secure that the foregoing trivial name shall in future apply not to the species (*Papilio xuthus* Linnaeus, 1767) to which, as Dr. Corbet has shown, it properly belongs under a strict application of the *Règles*, but to the Nearctic species to which it is now usually applied.

4. Course (1) would suffice to secure the principal object in view, namely, to prevent the confusion which would follow if the trivial name *ajax* Linnaeus, 1758, were to replace the trivial name *xuthus* Linnaeus, 1767, for the well-known species to which that name has always been applied. If this course were to be adopted, the Nearctic species to which the name *ajax* Linnaeus, 1758, is currently applied would need to be found a new name.

5. Course (2), like Course (1), would prevent the confusion which would result from the transfer of the trivial name *ajax* Linnaeus to the species now known as *Papilio xuthus*. In addition, Course (2) would preserve the trivial name *ajax* Linnaeus for the Nearctic species, to which it is commonly applied. Course (2) corresponds exactly to the action taken by the Commission in regard to the trivial name *iris* Linnaeus, 1758, as published in the binominal combination *Papilio iris* ; in that case also, Dr. Corbet had brought forward evidence to show that a trivial name (*iris*) invariably applied to a very well-known

European species ("The Purple Emperor") properly applied to an allied, and also very well-known European species (*Papilio ilia* [Schiffermüller and Denis], 1775). In that case, the Commission, in order to prevent the confusion which such a transfer of the trivial name *iris* would inevitably entail, used their Plenary Powers to direct that this trivial name was in future to apply to the common European "Purple Emperor", and selected a well-known and easily accessible figure of that butterfly to be the figure by which the nominal species *Papilio iris* Linnaeus, 1758 (= *Apatura iris* (Linnaeus, 1758)) was in future to be identified (see 1950, *Bull. zool. Nomencl.* 4 : 540—542). Under Course (2) similar action could be taken to preserve the trivial name *ajax* Linnaeus, 1758, for the North American Swallowtail commonly known by that name.

6. The question whether or not it is desirable that the trivial name *ajax* Linnaeus, 1758, should be preserved in the manner described above for the species to which that name is commonly used, is a matter of special interest to American lepidopterists, and is accordingly a question on which it would be valuable to the Commission to have the advice of such specialists. It is particularly requested that any lepidopterist who is interested in this subject, should notify his views to the Commission as soon as possible.

6. *Publication of the present application* : The present application and the Secretary's accompanying note on procedure were published on 20th April 1951 in Part 1 of volume 2 of the *Bulletin of Zoological Nomenclature* (Corbet, 1951, *Bull. zool. Nomencl.* 2 : 26—29 ; Hemming, 1951, *ibid.* 2 : 29—30).

7. *Issue in 1951 of a Second Series of Public Notices* : Under the revised arrangements approved by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 50—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 20th April 1951, both in Part 1 of volume 2 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Corbet's application was published) and also to the other prescribed serial publications. In addition, Public Notice was given to a number of entomological serial publications in Europe and America. The publication of these Notices, like that of the Notices issued in 1947 under the procedure prescribed by the Monaco Congress of 1913 (paragraph 3 above), elicited no objection to the action proposed.

8. *Support received for Dr. Corbet's application* : The publication of the foregoing public notices elicited support for Dr. Corbet's proposal from :— (1) Mr. Cyril F. dos Passos (*The American Museum of Natural History, New York*) ; (2) Professor Erich Martin Hering (*Zoologisches Museum der Humboldt-Universität zu Berlin*) ; (3) Dr. Austin H. Clark (*Smithsonian Institution, United States National Museum, Washington, D.C., U.S.A.*) ; (4) Dr. William D. Field (*United States National Museum, Washington, D.C., U.S.A.*). Finally, Mr. Francis Hemming, as a lepidopterist, submitted a brief note of support. The communications so received are given in the immediately following paragraphs.

9. *Support received from Mr. Cyril F. dos Passos (The American Museum of Natural History, New York)* : On 15th May 1951, Mr. Cyril F. dos Passos (*The American Museum of Natural History, New York*) addressed a letter to the International Commission, covering the following statement of support for the application submitted by Dr. Corbet (dos Passos, 1951, *Bull. zool. Nomencl.* 2 : 349—350) :—

**On the proposal that the trivial name "ajax" Linnaeus, 1758, as published in the binominal combination "Papilio ajax", should be suppressed by the International Commission on Zoological Nomenclature under its Plenary Powers**

By CYRIL F. DOS PASSOS, LL.B.

(*Research Associate, Department of Insects and Spiders, American Museum of Natural History, New York*)

Reference is made to two prior papers on this subject published by A. Steven Corbet (1951, *Bull. zool. Nomencl.* 2 (1) : 26—29) and by Francis Hemming (*ibid.* 2 (1) : 29—30).

2. It having been ascertained by Corbet from an examination of the Linnean collection that the trivial name *ajax* Linnaeus, 1758, as published in the binominal combination *Papilio ajax*, was proposed for an Oriental species later named *Papilio xuthus* by Linnaeus in 1767, although never used for that insect, but by error having been applied by some authors to two Nearctic butterflies, the question arises whether it would be better (a) to suppress the name *ajax*, or (b) to apply it (incorrectly) by a suspension of the *Règles* to one of the Nearctic insects for which it has sometimes been used.

3. This problem involves the names of two Nearctic and one Oriental *Papilio*. I shall consider only the two former. One of these is a subspecies of *Papilio polyxenes* Fabricius, 1775, sometimes known as the common American on the Black (or Parsnip) Swallowtail, and the other is often referred to as *Papilio marcellus* Cramer, [1777], or the Papaw or Zebra Swallowtail. There has been considerable confusion as to which scientific names should be employed for these insects. Recent American authors have shown a tendency to abandon the name *ajax* for either of them, although one follows McDunnough (1938, "Check List of the Lepidoptera of Canada and the United States of America". *Mem. S. Calif. Acad. Sci.* 1 : 5) and uses *ajax* for the first-mentioned butterfly. Holland (1931, *Butterfly Book* (revised ed.) : 314) used *asterius* for the subspecies of *polyxenes* inhabiting North America, and *ajax* for the more southerly Papaw or Zebra Swallowtail in direct contradiction to the then current Barnes and Benjamin list (1926, "Check List of the Lepidoptera of Boreal America". *Bull. S. Calif. Acad. Sci.* 25 (1) : 5). Clark (1932, "Butterflies of the District of Columbia and vicinity", *Bull. U.S. nat. Mus.* 157 : 191) used *asterias* for the Nearctic subspecies of *polyxenes* but *marcellus* Boisduval (*recte* Cramer) for the Papaw or Zebra Swallowtail and omitted *ajax* entirely. Macy and Shepard ([1941], *Butterflies, a Handbook of the butterflies of the United States, complete for the Region north of the Potomac and Chio Rivers and east of the Dakotas* : iii) stated that ". . . In order to achieve uniformity, . . ." they followed the nomenclature of the McDunnough check list, Brown (1951, "The American Papilios", *The Lepidopterists' News* 4 : 63) also used *ajax* for the species *polyxenes*. Finally, Klots (1951, *A Field Guide to the Butterflies of North America, east of the Great Plains* : 172) employed *asterius* Stoll, [1784], for the Nearctic subspecies *polyxenes* and omitted *ajax*, except that (erroneously) he placed *ajax* Clerck, 1764, in the synonymy.

4. Thus we find *ajax* in recent years used for two different species of Nearctic butterflies which have valid names, *i.e.*, *asterius* and *marcellus*, and on top of that it is now discovered that *ajax* is not properly applicable to either of them. In view of the improper use of *ajax*, the lack of uniformity among American authors respecting the applicability of that name to one Nearctic species, and the fact that some authors have dropped the name entirely, no harm and much good would be done by the suppression of the name *ajax* and that course is undoubtedly the most desirable one to follow. Therefore, I recommend that the International Commission on Zoological Nomenclature take such action.

10. Support received from Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin) : On 28th May 1951, Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin) addressed the

following letter to the Commission in support of Dr. Corbet's proposal (Hering, 1951, *Bull. zool. Nomencl.* 2 : 350) :—

**Support for the proposal submitted by Dr. A. Steven Corbet for the suppression of the trivial name " ajax " Linnaeus, 1758, as published in the binominal combination " Papilio ajax " (Class Insecta, Order Lepidoptera)**

By ERICH MARTIN HERING

(*Zoologisches Museum der Humboldt-Universität zu Berlin*)

There is no doubt that, under a strict application of the Rules, the trivial name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax*, should be employed for the species generally known as *Papilio xuthus* Linnaeus, 1767. To prevent the confusion which would follow if *ajax* Linnaeus, 1758, were to replace *xuthus* Linnaeus, 1767, I propose that the International Commission on Zoological Nomenclature should use its Plenary Powers to suppress the trivial name *ajax* Linnaeus, 1758, altogether.

11. *Support received from Dr. Austin H. Clark (Smithsonian Institution, United States National Museum, Washington, D.C., U.S.A.)* : On 28th May 1951, Dr. Austin H. Clark (*Smithsonian Institution, United States National Museum, Washington, D.C., U.S.A.*) addressed to the Commission the following letter of support for Dr. Corbet's application (1952, *Bull. zool. Nomencl.* 6 : 167) :—

**On the proposed use of the Plenary Powers to suppress the trivial name " ajax " Linnaeus, 1758, as published in the combination " Papilio ajax " (Class Insecta, Order Lepidoptera)**

By AUSTIN H. CLARK

(*Smithsonian Institution, U.S. National Museum, Washington, D.C., U.S.A.*)

Pray put me down as heartily in favor of suppressing the name (*Papilio ajax* Linnaeus, 1758. With all due respect to the late Dr. Corbet I believe that he was in error in assuming that the name *ajax* was based on what we now know as *Papilio xuthus*.

In the original description " P.E. alis obtuse caudatis concoloribus fuscis : fasciis flavescentibus angulo ani fulvo " the one really diagnostic feature is expressed by " *alis obtuse caudatis* ".

This cannot apply to *xuthus*, but does apply to specimens of what we know as *P. cresphontes* (see *Bull. U.S. Nat. Mus.* 157 : pl. 31, fig. 1). The rest of the description and the locality also fit *P. cresphontes*. Furthermore, the name *ajax*, the powerful and handsome son of Telemon, would be quite appropriate for the largest of North American butterflies.

P. L. S. Müller (1775, vol. 5 : pl. 17, fig. 3) figures *P. thoas* under the name "Das Gelbfeld, *Papilio ajax*" and other early authors figured *thoas* under the name *ajax*.

I am quite convinced that the Linnean name *ajax* refers to *P. cresphontes*. But I am not suggesting that *ajax* replace *cresphontes*. I am bringing this to your attention merely to emphasise the desirability of suppressing the name *ajax*.

12. Support received from Dr. William D. Field (United States National Museum, Washington, D.C., U.S.A.): On 30th July 1951, Dr. William D. Field (United States National Museum, Washington, D.C., U.S.A.) addressed a letter to the Commission, covering the following statement of support for the action proposed by Dr. Corbet's proposal (Field, 1951, *Bull. zool. Nomencl.* 6 : 105—106) :—

**On the proposed suppression of the trivial name " ajax " Linnaeus, 1758  
(Class Insecta, Order Lepidoptera)**

By WILLIAM D. FIELD

(United States National Museum, Washington, D.C., U.S.A.)

After reviewing the problem under discussion (Corbet, 1951, *Bull. zool. Nomencl.* 2 : 26—29), I find my thoughts reduced to four beliefs :—

- (A) It is clear that Linnaeus confused three species under the trivial name *ajax* (*Papilio ajax*) : First, the species usually known as *Papilio glaucus* Linnaeus, which is the species described by Ray in the first reference listed by Linnaeus under *ajax* (Raj. ins. 111, n.2).

Second, the species usually known as *Iphioides marcellus* (Cramer), which is the species illustrated by Edwards in the second reference listed by Linnaeus under *ajax* (Edw. av. 34). Third, the species described in the very brief Linnean description. Although much debate has centred upon what species best fits this brief description, it is undeniable that neither of the above-mentioned species applies to it.

- (B) Although there has been no uniformity in applying the name *ajax*, it has most frequently been applied to the species commonly known as *Papilio polyxenes asterius* Stoll and *Iphiclides marcellus* (Cramer).
- (C) The habitat cited by Linnaeus "Habitat in America boreali" does not necessarily throw light upon the correct application of the name *ajax*, as Linnaeus and other early workers were often led astray by false locality information.
- (D) Corbet has shown that in the Linnean collection there is an undoubted Linnean specimen of the Oriental species generally known as *Papilio xuthus* Linnaeus, 1767, labelled "*ajax*" in Linnaeus' own handwriting. If this were regarded as a holotype (as it seems to be), then the name *ajax* would be transferred to a species not identified with this name for nearly the past 200 years.

Therefore I support the Corbet proposal and consider that it would be better to eliminate the name *Papilio ajax* Linnaeus, 1758, from zoological nomenclature.

13. *Support received from Mr. Francis Hemming (London)* : On 15th March 1952, Mr. Francis Hemming (*London*) submitted the following statement in which he associated himself with the American and German entomologists who had already notified their support for the use by the International Commission of its Plenary Powers for the purpose of suppressing the specific name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax* :—

**The need for removing the instability arising from Dr. Corbet's discovery of the identity of the species to which the name "*Papilio ajax*" Linnaeus, 1758, is properly applicable**

By FRANCIS HEMMING, C.M.G., C.B.E.  
(*London*)

In common with all other students of the Holarctic butterflies, I have long been concerned with the confusion arising from the doubts as to the way in which the trivial name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax*, should be applied. Dr. Corbet's recent discovery that this name is not properly applicable to any of the Nearctic species for which it has at various times been used and that under the *Règles* it should replace the name *xuthus* Linnaeus, 1767, as published in the combination *Papilio xuthus*, creates a situation

which, in my view, can be solved only by the use of the Plenary Powers by the Commission for the purpose of suppressing the name *ajax* Linnaeus for the purposes of the Law of Priority, though not for those of the Law of Homonymy. It would, I consider, be quite intolerable that Dr. Corbet's discovery, interesting though it is, should be allowed both to transfer to the Palaearctic and Indo-Oriental lists a name (*ajax*) which has never been regarded as belonging to a Palaearctic or Indo-Oriental species and, when used, has always been applied to a Nearctic species and at the same time to replace a very well-known name (*xuthus*), which has been in continuous use for the Palaearctic and Indo-Oriental species concerned for the whole of the period of over one hundred and eighty years which has elapsed since the species concerned was given this name by Linnaeus in 1767.

I, therefore, join my American and German colleagues in urging most strongly that the deadlock which would be created by the strict application of the *Règles* in this case should be broken by the International Commission through the use of its Plenary Powers to suppress the name *ajax* Linnaeus, 1758 (*Papilio*), a name which has never been consistently used in any one sense, which has already given rise to serious uncertainty and confusion in the literature of the North American "Swallowtails" and which, if not killed by the Commission's Plenary Powers, will now inject a ludicrous and quite unjustifiable element of confusion into the literature of the Palaearctic and Indo-Oriental species of this group.

### III.—THE DECISION OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

14. *Issue of Voting Paper V.P. (52) 3* : On 7th April 1952, a Voting Paper (V.P. (52) 3) was issued in which the Members of the Commission were invited to vote either for, or against, the proposal "relating to the trivial name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax*, set out at the foot of the present Voting Paper". The formula referred to in the foregoing sentence was as follows:— "The trivial name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax*, is hereby suppressed under the Plenary Powers for the purposes of the Law of Priority but not for those of the Law of Homonymy, and is hereby placed on the *Official Index of Rejected and Invalid Specific Trivial Names in Zoology*. The trivial name *xuthus*



Linnaeus, 1767, as published in the combination *Papilio xuthus*, is hereby placed on the *Official List of Specific Trivial Names in Zoology*".

15. *The prescribed Voting Period*: As the foregoing Voting Paper was issued under the Three-Month Rule, the prescribed Voting Period closed on 7th July 1952.

16. *Particulars of the Voting on Voting Paper V.P. (52) 3*: The state of the voting on Voting Paper V.P. (52) 3 at the close of the prescribed Voting Period was as follows:—

(a) *Affirmative Votes had been given by the following sixteen (16) Commissioners (arranged in the order in which Votes were received)*:

Calman ; Hering ; do Amaral ; Dymond ; Riley ;  
Cabrera ; Stoll ; Esaki ; Pearson ; Bonnet ; Mertens ;  
Lemche ; Vokes ; Bradley ; Boschma ; Hemming ;

(b) *A Negative Vote had been given by one (1) Commissioner* :  
Hankó ;

(c) *Voting Paper V.P. (52) 3 had not been returned by one (1) Commissioner* :  
Jaczewski.

17. *Declaration of Result of Vote*: On 7th July 1954, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P. (52) 3, signed a Certificate that the Votes cast were as set out in paragraph 16 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

18. *Note on the place of first publication of the name " Papilio xuthus " Linnaeus, 1767*: On 24th February 1954, Mr. Francis

Hemming, as Secretary to the Commission placed the following note regarding the place of first publication of the name *Papilio xuthus* Linnaeus, 1767, on the Commission's File Z.N.(S.) 192, relating to the present case :—

**On the place of first publication of the name  
“*Papilio xuthus*” Linnaeus, 1767**

By FRANCIS HEMMING, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

As part of its decision to use its Plenary Powers for the purpose of suppressing the specific name *ajax* Linnaeus, 1758, as published in the combination *Papilio ajax*, the Commission has decided to place the specific name *xuthus* Linnaeus, 1767, as published in the combination *Papilio xuthus*, on the *Official List of Specific Names in Zoology*. It will be necessary to cite in the *Opinion* dealing with this case the original reference for the name *Papilio xuthus* Linnaeus, and, since there is, as I know as a lepidopterist, a slight complication in regard to this matter, it is desirable that the following short note should be added in regard to it.

2. The well-known Japanese and East Oriental Swallowtail Butterfly now known as *Papilio xuthus* was described by Linnaeus in 1767 in the 12th Edition of the *Systema Naturae* on page 751 in the (continuously paged) second section of volume 1. The name there applied to this species was *Papilio xanthus*. On the unnumbered page containing the *Corrigenda* inserted at the end of this volume Linnaeus corrected the spelling “*xanthus*” to *xuthus*”, and it is this latter spelling which has ever since been employed, except by an occasional author who looked up the original description on page 751 but did not notice the entry in the *Corrigenda* at the end of the volume, and therefore used the uncorrected spelling “*xanthus*”. While until 1953 it was often a matter of doubt whether a given Original Spelling for a name was subject to emendation under Article 19 of the *Règles*, it was always agreed that such emendations ought to be accepted in cases where the correction of the Original Spelling was actually made in the book in which the name in question was first published. The view so taken in such cases was expressly endorsed as correct by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 44, Point (1)(b)(i)). It is clear, therefore, that the spelling “*xuthus*” is the correct spelling for this specific name.

3. Now that the foregoing specific name is to be placed on the *Official List* of such names, it will be necessary to note in that *List* that the spelling “*xuthus*” is an Emendation and that the Original Spelling was “*xanthus*”. Under the General Directive that the

Ruling given in every *Opinion* is to cover all questions involved in the application dealt with in it and the Direction by the Paris Congress that every objectively valid or invalid name dealt with in an *Opinion* is to be placed on the appropriate *Official List* or *Official Index*, as the case may be, it becomes an obligation in the present case that the name *xanthus* Linnaeus, 1767, as published in the combination *Papilio xanthus*, should, as an Invalid Original Spelling, now be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*.

19. On 25th February 1954, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P. (52) 3, subject to the adjustment specified in paragraph 18 above.

20. The following are the original references for the names placed on the *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

*ajax*, *Papilio*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 462  
*xanthus*, *Papilio*, Linnaeus, 1767, *Syst. Nat.* (ed. 12) 1 (2) : 751  
*xuthus*, *Papilio*, Linnaeus, 1767, *Syst. Nat.* (ed. 12) 1 (2) :  
*Corrigenda* (ref. to *Papilio xanthus* on page 751)

21. At the time of the adoption of the Ruling given in the present *Opinion*, the expression prescribed for the second portion of the binomen which constitutes the scientific name of a species was the expression "trivial name" and the *Official List* reserved for recording such names was styled the *Official List of Specific Trivial Names in Zoology*, the word "trivial" appearing also in the title of the *Official Index* reserved for recording rejected and invalid names of this category. Under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the expression "specific name" was substituted for the expression "trivial name" and corresponding changes were made in the titles of the *Official List* and *Official Index* of such names (1953, *Copenhagen Decisions zool. Nomencl.* : 21). The changes in terminology so adopted have been incorporated in the Ruling given in the present *Opinion*.

22. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

23. The present *Opinion* shall be known as *Opinion Two Hundred and Eighty-Six (286)* of the International Commission on Zoological Nomenclature.

DONE in London, this First day of March, Nineteen Hundred and Fifty-Four.

*Secretary to the International Commission  
on Zoological Nomenclature*

**FRANCIS HEMMING**